

What is claimed is:

- Sub A2* → 1. A method for continuously forming molded parts includes providing an extruder; directing a hollow column of plastic material from said
5 extruder; providing a plurality of die blocks defining mold halves including planar end segments having differing geometry and joined by intermediate convoluted segments; continuously moving such die blocks for receiving and forming the hollow column into a continuous shape having spaced end segments and intermediate convoluted segments and advancing the shaped column of plastic
10 material from the continuously moving die blocks; providing a cutter; synchronizing the cutter action to the movement of the shaped column for separating the end segments to form one or more parts having planar end segments of the same or differing geometry in each part or with differing geometry from part to part.
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2. The process of claim 1 wherein the mold halves are configured to have semicircular surfaces thereon defining a different end connection on opposite ends of the parts formed therein.
- Sub B'* → 3. The process of claim 1 wherein the mold halves are
20 configured to have semicircular surfaces thereon to form end segments of differing geometry from end to end and from part to part.
4. The process of claim 1 wherein each of said mold halves has
25 a surface thereon between end segment surfaces thereon; said cutter synchronized with the continuous formation of a molded tubular member by the corrugator for removing said surface from the end segments.
- Sub C* → 5. The process of claim 1 wherein the mold halves are
30 configured with identical geometry and wherein a continuous molded extrusion

shape is passed from the moveable mold blocks having a repeating pattern A-B-C-A-B-C defined by the expression $(A-B-C)_n$.

5 *Sub B'* 6. The process of claim 1 wherein the mold halves are configured with differing geometries and wherein the continuous molded extrusion has a repeating pattern A-B-C-C'-B-A-A-B-C-C'-B-A defined by the expression $(A-B-C-C'-B-A)_n$.

10 7. The process of claim 1 wherein extrudent material for the aforesaid process is a thermoplastic flexible synthetic polymer selected from the group consisting of thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers and the base is a rigid thermoplastic such as polypropylene; filled polypropylene; talc-filled
15 polypropylene; polyethylene; high density polyethylene; polystyrene; PVC resins; ABS resins; TPO resins; Nylon resins; Metallocene polymers or a flexible thermoplastic material such as thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers.

20 8. The process of claim 2 wherein the mold halves are configured with identical geometry and wherein a continuous molded extrusion shape is passed from the moveable mold blocks having a repeating pattern A-B-C-A-B-C defined by the expression $(A-B-C)_n$.

25 9. The process of claim 2 wherein the mold halves are configured with differing geometries and wherein the continuous molded extrusion has a repeating pattern A-B-C-C'-B-A-A-B-C-C'-B-A defined by the expression $(A-B-C-C'-B-A)_n$.

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10. The process of claim 2 wherein extrudent material for the aforesaid process is a thermoplastic flexible synthetic polymer selected from the group consisting of thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers and the base is a rigid thermoplastic such as polypropylene; filled polypropylene; talc-filled polypropylene; polyethylene; high density polyethylene; polystyrene; PVC resins; ABS resins; TPO resins; Nylon resins; Metallocene polymers or a flexible thermoplastic material such as thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers.

11. The process of claim 3 wherein the mold halves are configured with identical geometry and wherein a continuous molded extrusion shape is passed from the moveable mold blocks having a repeating pattern A-B-C-A-B-C defined by the expression $(A-B-C)_n$.

12. The process of claim 3 wherein the mold halves are configured with differing geometries and wherein the continuous molded extrusion has a repeating pattern A-B-C-C'-B-A-A-B-C-C'-B-A defined by the expression $(A-B-C-C'-B-A)_n$.

13. The process of claim 3 wherein extrudent material for the aforesaid process is a thermoplastic flexible synthetic polymer selected from the group consisting of thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers and the base is a rigid thermoplastic such as polypropylene; filled polypropylene; talc-filled polypropylene; polyethylene; high density polyethylene; polystyrene; PVC resins;

ABS resins; TPO resins; Nylon resins; Metallocene polymers or a flexible thermoplastic material such as thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers.

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Sub A⁵ 14. The process of claim 4 wherein the mold halves are configured with identical geometry and wherein a continuous molded extrusion shape is passed from the moveable mold blocks having a repeating pattern A-B-C-A-B-C defined by the expression $(A-B-C)_n$.

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Sub B¹ 15. The process of claim 4 wherein the mold halves are configured with differing geometries and wherein the continuous molded extrusion has a repeating pattern A-B-C-C-B-A-A-B-C-C-B-A defined by the expression $(A-B-C-C-B-A)_n$.

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16. The process of claim 4 wherein extrudent material for the aforesaid process is a thermoplastic flexible synthetic polymer selected from the group consisting of thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers and the base is a rigid thermoplastic such as polypropylene; filled polypropylene; talc-filled polypropylene; polyethylene; high density polyethylene; polystyrene; PVC resins; ABS resins; TPO resins; Nylon resins; Metallocene polymers or a flexible thermoplastic material such as thermoplastic vulcanizates (TPV's); thermoplastic polyolefins (TPO's); ionomer resins, such as Surlyn; flexible PVC resins; thermoplastic elastomers (TPE's); flexible polyurethane polymers.

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